DECISION SUPPORT FRAMEWORK FOR THE SELECTION OF ERP SOFTWARE FOR MANUFACTURING COMPANIES

By

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DECLARATION

"I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations"

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To the best of my knowledge, the above particulars are correct.

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Supervisor

Abstract

In Sri Lanka as well as in the world, Enterprise Resource Planning (ERP) system implementations have been considerably increased, however, all the implementations are not success stories. Most of these post implementation problems are due to inappropriate selection of the systems.

This dissertation discusses and presents a decision support framework for the selection of ERP systems for manufacturing companies especially in Sri Lanka.

First, ERP evaluation criteria is developed using past literature and through a questionnaire distributed to Sri Lankan manufacturing companies. The main focus areas of Sri Lankan manufacturing industry, for the ERP system evaluation is identified through this questionnaire. However, the availability of related literature for the Sri Lanka industry is very limited and therefore the international experience is used through the literature.

Selection of the best suited ERP system leads to a multi-criteria decision making problem as there are many criteria to evaluate. One of the best suited methods to solve this kind of a problem is Analytic Hierarchy Process (AHP) and therefore the ERP selection framework is modelled using AHP. To be able to use this framework easily, the same framework is implemented using Expert Choice software which is just the software implementation of AHP.

To illustrate the importance and effectiveness of the model, it is implemented to a manufacturing company in Sri Lanka.

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